



Household Hazardous Waste Program



Hazards on the Homefront Curriculum. *Photo: D. Batura*

King County Solid Waste Division and Washington State University King County Extension Partnership

2005 is the fourth year of the partnership between WSU King County Extension (KCE) and King County Solid Waste Division (KCSWD). Over the past four years great progress has been made towards integrating goals and objectives to create a solid partnership with concrete benefits.

As part of its Household Hazardous Waste (HHW) school and youth program efforts, the King County Solid Waste Division funds and oversees a youth training program. This program is implemented by Washington State University King County Extension (WSU KCE), and was initiated in the fall of 2002. King County's Hazards on the Homefront curriculum served as the foundation for creating a program to provide youth with a comprehensive and hands-on learning experience. The curriculum consists of seven

different lessons from which 4th – 12th grade teachers can choose. KCE has used the curriculum to create an annual, multiweek intensive project. The project combines each lesson in the curriculum, two field trips, expert presenters and additional outreach projects to create a program that will have a lasting impact on the youth participants. Student evaluations constantly show that the program is exceeding its goals and expectations.

Program Goals:

- 1. Educate youth in HHW principles.
- 2. Educate the community, through the youth community service requirement, about HHW principles.

This program is designed to increase youth-based knowledge of Household Hazardous Waste issues through outreach programs to at-risk youth in King County. The program excels by making topics relevant to the lives of the teens involved. For this project we define "at-risk youth" as students from economically disadvantaged communities, whose academic performance is below average, or students with a history of social disengagement.

The final project of this eight-week program is for student teams to take one of the lessons learned and present it to a local 4th, 5th, or 6th grade classroom.

Key Program Accomplishments:

- Over four years, the eight-week program has reached five different schools, directly reaching at least 245 high school students.
- Through the student outreach and presentation project requirement, students have educated at least 1070 4th, 5th and 6th graders over the past three years.
- Students that have struggled with traditional lecture-based education flourish with hands-on, investigative curriculum.
- The students quickly master the curriculum when expected to teach it to others.
- The team outreach activity is an exciting, positive experience and instills a sense of pride and accomplishment for the students involved.



Students teaching an HHW lesson at Greenlake Elementary School. *Photo D. Batura*

Inspiring Youth To Be Stewards Of The Local Environment

2005 Fall Program

During the fall of 2005 KCE conducted the annual program at West Auburn High School (WAHS), an alternative school in the Auburn School District that attracts students from south King County and north Pierce County. The student population is highly transitional and at-risk.

The program partnered with West Auburn's Independent Study Science and Science Links classes. KCE faculty taught two class periods daily, three days a week for the duration of the program (November 2nd – December 16th). Student participation varied as the student population changes every two weeks; however the average participation was fifteen students per class or 30 students daily.

The majority of the students were interested in the activities and engaged with the experiments we conducted during class. They were particularly engaged with discussions the connected household hazardous waste issues to health, social justice, and culture.



West Auburn High School Student teaching kids about Household Hazardous Waste

Photo D. Batura

Three student teams completed the outreach project by presenting to fourth grade students at Auburn's Washington Elementary School. The WAHS students did an amazing job of supporting each other in order to deliver a successful presentation and activity. The elementary teachers and their students were thrilled to have high school students as guest instructors. As the WAHS student's left the elementary school, they were all excited about the great job they had done. As the students boarded the bus to return to school, on student turned to the others and said "That was so much fun! I wish we could stay and teach all day!"



High School student teaching younger students.

Photo D. Batura

Overall Program Success

- All student participation was enthusiastic; however the student drop-out rate is higher at alternative schools, presenting a challenge to multi-week teamwork.
- Alternative School students consider the health and social justice aspects of HHW more seriously than the students from a traditional classroom.
- The community outreach component is a positive way to introduce students to volunteerism
- Student participants demonstrate significant academic improvement based on pre and post test results.
- Numerous students have decided to continue volunteering with elementary students after the program is over.
- Student participants demonstrate consistent academic improvement.
- Several schools that have been involved have adopted the full curriculum as an annual component of their science classes.

The team outreach project demonstrates positive results year after year. The students show an undeniable increase in camaraderie, pride and self-esteem once they have accomplished this assignment as a team.

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Fourth grade student learning about HHW

Photo D. Batura